



Sequence Listing-vers.4.txt

Sequence Listing

<110> Verfaillie, Catherine  
Jiang, Yuehua

<120> Neuronal Differentiation of Stem Cells  
<130> 890003-2006.1

<140> US 10/561,826  
<141> 2006-10-17

<150> PCTUS04/21553  
<151> 2004-07-02

<160> 38

<170> Microsoft Word 2003

<210> 1  
<211> 23  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Primer

<440> 1

Ala Ala Gly Ala Thr Gly Cys Ala Cys Ala Ala Cys Thr Cys Gly Gly  
5 10 15  
Ala Gly Ala Thr Cys Ala Gly  
20

<210> 2  
<211> 25  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Primer

<440> 2  
Cys Cys Ala Thr Gly Ala Cys Cys Thr Ala Thr Ala Cys Thr Cys Ala  
5 10 15  
Gly Gly Cys Thr Thr Cys Ala Gly Gly  
20 25

<210> 3  
<211> 18  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Primer

<440> 3  
Ala Gly Gly Cys Gly Cys Thr Gly Thr Thr Cys Gly Cys Ala Ala Ala  
5 10 15  
Gly Ala

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<210> 4  
<211> 20  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Primer

<440> 4  
Cys Cys Ala Gly Gly Cys Ala Thr Cys Ala Gly Ala Gly Cys Ala Cys  
5 10 15  
Ala Thr Cys Ala  
20

<210> 5  
<211> 21  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Primer

<440> 5  
Ala Ala Ala Cys Gly Cys Ala Ala Gly Ala Gly Gly Gly Ala Thr Gly  
5 10 15  
Ala Ala Gly Gly Thr  
20

<210> 6  
<211> 20  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Primer

<440> 6  
Thr Gly Thr Gly Thr Gly Gly Cys Ala Cys Cys Thr Gly Gly Ala Gly  
5 10 15  
Thr Thr Cys Ala  
20

<210> 7  
<211> 23  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Primer

<440> 7  
Gly Ala Gly Gly Ala Ala Ala Thr Gly Thr Ala Cys Cys Gly Thr Cys  
5 10 15  
Thr Gly Ala Thr Gly Cys Thr  
20

Sequence Listing-vers.4.txt

<210> 8  
<211> 23  
<212> PRT  
<213> Artificial sequence  
  
<220>  
<223> Primer

<440> 8  
Thr Gly Ala Ala Gly Ala Gly Ala Gly Cys Gly Gly Ala Gly Ala Ala  
5 10 15  
Gly Gly Ala Gly Ala Thr Cys  
20

<210> 9  
<211> 26  
<212> PRT  
<213> Artificial sequence  
  
<220>  
<223> Primer

<440> 9  
Gly Ala Gly Ala Ala Gly Ala Cys Ala Gly Thr Gly Ala Gly Gly Cys  
5 10 15  
Ala Gly Ala Thr Gly Ala Gly Thr Thr Ala  
20 25

<210> 10  
<211> 25  
<212> PRT  
<213> Artificial sequence  
  
<220>  
<223> Primer

<440> 10  
Gly Ala Gly Gly Ala Gly Thr Gly Gly Thr Ala Thr Cys Gly Gly Thr  
5 10 15  
Cys Thr Ala Ala Gly Thr Thr Thr Gly  
20 25

<210> 11  
<211> 20  
<212> PRT  
<213> Artificial sequence  
  
<220>  
<223> Primer

<440> 11  
Gly Thr Gly Cys Ala Gly Cys Thr Thr Gly Thr Thr Cys Gly Ala Cys  
5 10 15  
Thr Cys Cys Gly  
20

<210> 12  
<211> 22

Sequence Listing-vers.4.txt

<212> PRT  
<213> Artificial sequence

<220>  
<223> Primer

<440> 12  
Ala Gly Gly Thr Thr Gly Ala Cys Cys Gly Thr Gly Ala Gly Ala Gly  
5 10 15  
Cys Thr Gly Ala Ala Thr  
20

<210> 13  
<211> 22  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Primer

<440> 13  
Gly Cys Ala Ala Thr Cys Ala Thr Cys Ala Cys Cys Ala Cys Cys Thr  
5 10 15  
Cys Cys Ala Thr Thr Ala  
20

<210> 14  
<211> 23  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Primer

<440> 14  
Ala Gly Thr Thr Cys Thr Cys Cys Cys Ala Gly Gly Ala Cys Ala Thr  
5 10 15  
Thr Gly Gly Ala Cys Thr Thr  
20

<210> 15  
<211> 22  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Primer

<440> 15  
Gly Gly Ala Thr Gly Gly Ala Gly Thr Cys Thr Gly Ala Thr Gly Thr  
5 10 15  
Cys Ala Cys Cys Ala Ala  
20

<210> 16  
<211> 20  
<212> PRT  
<213> Artificial sequence

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<220>

<223> Primer

<440> 16

Thr Thr Cys Cys Ala Ala Thr Gly Thr Gly Cys Ala Gly Cys Thr Gly  
5 10 15  
Ala Gly Thr Cys  
20

<210> 17

<211> 22

<212> PRT

<213> Artificial sequence

<220>

<223> Primer

<440> 17

Thr Gly Thr Ala Ala Thr Cys Cys Gly Gly Gly Thr Gly Thr Thr Cys  
5 10 15  
Cys Thr Thr Cys Ala Thr  
20

<210> 18

<211> 26

<212> PRT

<213> Artificial sequence

<220>

<223> Primer

<440> 18

Gly Ala Ala Gly Cys Thr Cys Cys Ala Thr Ala Thr Cys Cys Cys Thr  
5 10 15  
Gly Gly Gly Thr Gly Gly Ala Ala Ala Gly  
20 25

<210> 19

<211> 19

<212> PRT

<213> Artificial sequence

<220>

<223> Primer

<440> 19

Cys Cys Thr Cys Cys Thr Cys Gly Cys Gly Cys Ala Thr Gly Ala Ala  
5 10 15  
Gly Ala Thr

<210> 20

<211> 21

<212> PRT

<213> Artificial sequence

<220>

<223> Primer

<440> 20

Sequence Listing-vers.4.txt

Cys Gly Thr Cys Thr Gly Thr Gly Cys Cys Thr Gly Ala Cys  
5 10 15  
Ala Cys Ala Thr Thr  
20

<210> 21  
<211> 19  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Primer

<440> 21  
Ala Ala Cys Ala Gly Gly Thr Cys Thr Cys Cys Cys Gly Cys Ala  
5 10 15  
Thr Cys Thr

<210> 22  
<211> 23  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Primer

<440> 22  
Cys Ala Cys Cys Cys Thr Cys Ala Gly Gly Ala Ala Cys Ala Gly Ala  
5 10 15  
Gly Thr Gly Ala Cys Thr Thr  
20

<210> 23  
<211> 25  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Primer

<440> 23  
Thr Cys Thr Thr Gly Ala Cys Cys Ala Thr Cys Ala Thr Cys Thr Thr  
5 10 15  
Cys Thr Cys Cys Ala Gly Ala Thr Cys  
20 25

<210> 24  
<211> 24  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Primer

<440> 24  
Thr Cys Thr Gly Gly Ala Gly Thr Thr Ala Ala Gly Ala Ala Ala Thr  
5 10 15  
Cys Gly Gly Ala Gly Cys Thr Gly  
20

Sequence Listing-vers.4.txt

<210> 25  
<211> 21  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Primer

<440> 25  
Gly Cys Cys Thr Cys Thr Gly Thr Thr Cys Thr Cys Cys Ala Gly Cys  
5 10 15  
Thr Thr Gly Cys Thr  
20

<210> 26  
<211> 19  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Primer

<440> 26  
Gly Cys Cys Gly Cys Thr Cys Thr Ala Gly Gly Ala Cys Thr Cys  
5 10 15  
Gly Thr Thr

<210> 27  
<211> 20  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Primer

<440> 27  
Ala Thr Gly Cys Thr Cys Thr Cys Thr Gly Gly Cys Thr Cys Cys Thr  
5 10 15  
Thr Gly Gly Cys  
20

<210> 28  
<211> 15  
<212> PRT  
<213> Artificial sequence

<220>  
<223> Primer

<440> 28  
Thr Gly Gly Gly Cys Ala Gly Gly Cys Ala Thr Gly Gly Cys  
5 10 15

<210> 29  
<211> 20  
<212> PRT  
<213> Artificial sequence

Sequence Listing-vers.4.txt

<220>

<223> Primer

<440> 29

Ala Thr Gly Gly Gly Cys Ala Cys Ala Thr Thr Gly Thr Gly Cys Thr  
5 10 15

Thr Cys Thr Gly  
20

<210> 30

<211> 21

<212> PRT

<213> Artificial sequence

<220>

<223> Primer

<440> 30

Ala Cys Ala Cys Ala Gly Cys Cys Cys Ala Ala Ala Cys Thr Cys Cys  
5 10 15

Ala Cys Ala Gly Thr  
20

<210> 31

<211> 22

<212> PRT

<213> Artificial sequence

<220>

<223> Primer

<440> 31

Thr Gly Ala Cys Gly Thr Thr Thr Cys Thr Cys Ala Gly Gly Cys Ala  
5 10 15

Thr Thr Ala Ala Gly Cys  
20

<210> 32

<211> 20

<212> PRT

<213> Artificial sequence

<220>

<223> Primer

<440> 32

Gly Gly Thr Gly Cys Ala Cys Thr Thr Gly Cys Thr Thr Gly Thr Gly  
5 10 15

Cys Ala Gly Thr  
20

<210> 33

<211> 288

<212> PRT

<213> Human Basic FGF

<220>

<223> Cytokine

Sequence Listing-vers.4.txt

<440> 33  
Met Val Gly Val Gly Gly Asp Val Glu Asp Val Thr Pro Arg Pro  
5 10 15  
Gly Gly Cys Gln Ile Ser Gly Arg Ala Ala Arg Gly Cys Asn Gly Ile  
20 25 30  
Pro Gly Ala Ala Ala Trp Glu Ala Ala Leu Pro Arg Arg Arg Pro Arg  
35 40 45  
Arg His Pro Ser Val Asn Pro Arg Ser Arg Ala Ala Gly Ser Pro Arg  
50 55 60  
Thr Arg Gly Arg Arg Thr Glu Glu Arg Pro Ser Gly Ser Arg Leu Gly  
65 70 75 80  
Asp Arg Gly Arg Gly Arg Ala Leu Pro Gly Gly Arg Leu Gly Gly Arg  
85 90 95  
Gly Arg Gly Arg Ala Pro Glu Arg Val Gly Gly Arg Gly Arg Gly Arg  
100 105 110  
Gly Thr Ala Ala Pro Arg Ala Ala Pro Ala Ala Arg Gly Ser Arg Pro  
115 120 125  
Gly Pro Ala Gly Thr Met Ala Ala Gly Ser Ile Thr Thr Leu Pro Ala  
130 135 140  
' Leu Pro Glu Asp Gly Gly Ser Gly Ala Phe Pro Pro Gly His Phe Lys  
145 150 155 160  
Asp Pro Lys Arg Leu Tyr Cys Lys Asn Gly Gly Phe Phe Leu Arg Ile  
165 170 175  
His Pro Asp Gly Arg Val Asp Gly Val Arg Glu Lys Ser Asp Pro His  
180 185 190  
Ile Lys Leu Gln Leu Gln Ala Glu Glu Arg Gly Val Val Ser Ile Lys  
195 200 205  
Gly Val Cys Ala Asn Arg Tyr Leu Ala Met Lys Glu Asp Gly Arg Leu  
210 215 220  
Leu Ala Ser Lys Cys Val Thr Asp Glu Cys Phe Phe Glu Arg Leu  
225 230 235 240  
Glu Ser Asn Asn Tyr Asn Thr Tyr Arg Ser Arg Lys Tyr Thr Ser Trp  
245 250 255  
Tyr Val Ala Leu Lys Arg Thr Gly Gln Tyr Lys Leu Gly Ser Lys Thr  
260 265 270  
Gly Pro Gly Gln Lys Ala Ile Leu Phe Leu Pro Met Ser Ala Lys Ser  
275 280 285  
<210> 34  
<211> 233  
<212> PRT

Sequence Listing-vers.4.txt

<213> Human FGF-8

<220>

<223> Cytokine

<440> 34

Met Gly Ser Pro Arg Ser Ala Leu Ser Cys Leu Leu Leu His Leu Leu  
5 10 15

Val Leu Cys Leu Gln Ala Gln Glu Gly Pro Gly Arg Gly Pro Ala Leu  
20 25 30

Gly Arg Glu Leu Ala Ser Leu Phe Arg Ala Gly Arg Glu Pro Gln Gly  
35 40 45

Val Ser Gln Gln His Val Arg Glu Gln Ser Leu Val Thr Asp Gln Leu  
50 55 60

Ser Arg Arg Leu Ile Arg Thr Tyr Gln Leu Tyr Ser Arg Thr Ser Gly  
65 70 75 80

Lys His Val Gln Val Leu Ala Asn Lys Arg Ile Asn Ala Met Ala Glu  
85 90 95

Asp Gly Asp Pro Phe Ala Lys Leu Ile Val Glu Thr Asp Thr Phe Gly  
100 105 110

Ser Arg Val Arg Val Arg Gly Ala Glu Thr Gly Leu Tyr Ile Cys Met  
115 120 125

Asn Lys Lys Gly Lys Leu Ile Ala Lys Ser Asn Gly Lys Gly Lys Asp  
130 135 140

Cys Val Phe Thr Glu Ile Val Leu Glu Asn Asn Tyr Thr Ala Leu Gln  
145 150 155 160

Asn Ala Lys Tyr Glu Gly Trp Tyr Met Ala Phe Thr Arg Lys Gly Arg  
165 170 175

Pro Arg Lys Gly Ser Lys Thr Arg Gln His Gln Arg Glu Val His Phe  
180 185 190

Met Lys Arg Leu Pro Arg Gly His His Thr Thr Glu Gln Ser Leu Arg  
195 200 205

Phe Glu Phe Leu Asn Tyr Pro Pro Phe Thr Arg Ser Leu Arg Gly Ser  
210 215 220

Gln Arg Thr Trp Ala Pro Glu Pro Arg  
225 230

<210> 35

<211> 204

<212> PRT

<213> Isoform A

<220>

<223> Cytokine

Sequence Listing-vers.4.txt

<440> 35  
Met Gly Ser Pro Arg Ser Ala Leu Ser Cys Leu Leu Leu His Leu Leu  
5 10 15

Val Leu Cys Leu Gln Ala Gln His Val Arg Glu Gln Ser Leu Val Thr  
20 25 30

Asp Gln Leu Ser Arg Arg Leu Ile Arg Thr Tyr Gln Leu Tyr Ser Arg  
35 40 45

Thr Ser Gly Lys His Val Gln Val Leu Ala Asn Lys Arg Ile Asn Ala  
50 55 60

Met Ala Glu Asp Gly Asp Pro Phe Ala Lys Leu Ile Val Glu Thr Asp  
65 70 75 80

Thr Phe Gly Ser Arg Val Arg Val Arg Gly Ala Glu Thr Gly Leu Tyr  
85 90 95

Ile Cys Met Asn Lys Lys Gly Lys Leu Ile Ala Lys Ser Asn Gly Lys  
100 105 110

Gly Lys Asp Cys Val Phe Thr Glu Ile Val Leu Glu Asn Asn Tyr Thr  
115 120 125

Ala Leu Gln Asn Ala Lys Tyr Glu Gly Trp Tyr Met Ala Phe Thr Arg  
130 135 140

Lys Gly Arg Pro Arg Lys Gly Ser Lys Thr Arg Gln His Gln Arg Glu  
145 150 155 160

Val His Phe Met Lys Arg Leu Pro Arg Gly His His Thr Thr Glu Gln  
165 170 175

Ser Leu Arg Phe Glu Phe Leu Asn Tyr Pro Pro Phe Thr Arg Ser Leu  
180 185 190

Arg Gly Ser Gln Arg Thr Trp Ala Pro Glu Pro Arg  
195 200

<210> 36  
<211> 215  
<212> PRT  
<213> Isoform B

<220>  
<223> Cytokine

<440> 36  
Met Gly Ser Pro Arg Ser Ala Leu Ser Cys Leu Leu Leu His Leu Leu  
5 10 15

Val Leu Cys Leu Gln Ala Gln Val Thr Val Gln Ser Ser Pro Asn Phe  
20 25 30

Thr Gln His Val Arg Glu Gln Ser Leu Val Thr Asp Gln Leu Ser Arg  
35 40 45

Sequence Listing-vers.4.txt

Arg Leu Ile Arg Thr Tyr Gln Leu Tyr Ser Arg Thr Ser Gly Lys His  
50 55 60

Val Gln Val Leu Ala Asn Lys Arg Ile Asn Ala Met Ala Glu Asp Gly  
65 70 75 80

Asp Pro Phe Ala Lys Leu Ile Val Glu Thr Asp Thr Phe Gly Ser Arg  
85 90 96

Val Arg Val Arg Gly Ala Glu Thr Gly Leu Tyr Ile Cys Met Asn Lys  
100 105 110

Lys Gly Lys Leu Ile Ala Lys Ser Asn Gly Lys Gly Lys Asp Cys Val  
115 120 125

Phe Thr Glu Ile Val Leu Glu Asn Asn Tyr Thr Ala Leu Gln Asn Ala  
130 135 140

Lys Tyr Glu Gly Trp Tyr Met Ala Phe Thr Arg Lys Gly Arg Pro Arg  
145 150 155 160

Lys Gly Ser Lys Thr Arg Gln His Gln Arg Glu Val His Phe Met Lys  
165 170 175

Arg Leu Pro Arg Gly His His Thr Thr Glu Gln Ser Leu Arg Phe Glu  
180 185 190

Phe Leu Asn Tyr Pro Pro Phe Thr Arg Ser Leu Arg Gly Ser Gln Arg  
195 200 205

Thr Trp Ala Pro Glu Pro Arg  
210 215

<210> 37

<211> 233

<212> PRT

<213> Isoform E

<220>

<223> Cytokine

<440> 37

Met Gly Ser Pro Arg Ser Ala Leu Ser Cys Leu Leu Leu His Leu Leu  
5 10 15

Val Leu Cys Leu Gln Ala Gln Glu Gly Pro Gly Arg Gly Pro Ala Le  
20 25 30

Gly Arg Glu Leu Ala Ser Leu Phe Arg Ala Gly Arg Glu Pro Gln Gly  
35 40 45

Val Ser Gln Gln His Val Arg Glu Gln Ser Leu Val Thr Asp Gln Leu  
50 55 60

Ser Arg Arg Leu Ile Arg Thr Tyr Gln Leu Tyr Ser Arg Thr Ser Gly  
65 70 75 80

Lys His Val Gln Val Leu Ala Asn Lys Arg Ile Asn Ala Met Ala Glu  
85 90 95

Sequence Listing-vers.4.txt

Asp Gly Asp Pro Phe Ala Lys Leu Ile Val Glu Thr Asp Thr Phe Gly  
100 105 110

Ser Arg Val Arg Val Arg Gly Ala Glu Thr Gly Leu Tyr Ile Cys Met  
115 120 125

Asn Lys Lys Gly Lys Leu Ile Ala Lys Ser Asn Gly Lys Gly Lys Asp  
130 135 140

Cys Val Phe Thr Glu Ile Val Leu Glu Asn Asn Tyr Thr Ala Leu Gln  
145 150 155 160

Asn Ala Lys Tyr Glu Gly Trp Tyr Met Ala Phe Thr Arg Lys Gly Arg  
165 170 175

Pro Arg Lys Gly Ser Lys Thr Arg Gln His Gln Arg Glu Val His Phe  
180 185 190

Met Lys Arg Leu Pro Arg Gly His His Thr Thr Glu Gln Ser Leu Arg  
195 200 205

Phe Glu Phe Leu Asn Tyr Pro Pro Phe Thr Arg Ser Leu Arg Gly Ser  
210 215 220

Gln Arg Thr Trp Ala Pro Glu Pro Arg  
225 230

<210> 38  
<211> 244  
<212> PRT  
<213> Isoform F

<220>  
<223> Cytokine

<440> 38  
Met Gly Ser Pro Arg Ser Ala Leu Ser Cys Leu Leu Leu His Leu Leu  
5 10 15

Val Leu Cys Leu Gln Ala Gln Glu Gly Pro Gly Arg Gly Pro Ala Leu  
20 25 30

Gly Arg Glu Leu Ala Ser Leu Phe Arg Ala Gly Arg Glu Pro Gln Gly  
35 40 45

Val Ser Gln Gln Val Thr Val Gln Ser Ser Pro Asn Phe Thr Gln His  
50 55 60

Val Arg Glu Gln Ser Leu Val Thr Asp Gln Leu Ser Arg Arg Leu Ile  
65 70 75 80

Arg Thr Tyr Gln Leu Tyr Ser Arg Thr Ser Gly Lys His Val Gln Val  
85 90 95

Leu Ala Asn Lys Arg Ile Asn Ala Met Ala Glu Asp Gly Asp Pro Phe  
100 105 110

Sequence Listing-vers.4.txt

Ala Lys Leu Ile Val Glu Thr Asp Thr Phe Gly Ser Arg Val Arg Val  
115 120 125

Arg Gly Ala Glu Thr Gly Leu Tyr Ile Cys Met Asn Lys Lys Gly Lys  
130 135 140

Leu Ile Ala Lys Ser Asn Gly Lys Gly Lys Asp Cys Val Phe Thr Glu  
145 150 155 160

Ile Val Leu Glu Asn Asn Tyr Thr Ala Leu Gln Asn Ala Lys Tyr Glu  
165 170 175

Gly Trp Tyr Met Ala Phe Thr Arg Lys Gly Arg Pro Arg Lys Gly Ser  
180 185 190

Lys Thr Arg Gln His Gln Arg Glu Val His Phe Met Lys Arg Leu Pro  
195 200 205

Arg Gly His His Thr Thr Glu Gln Ser Leu Arg Phe Glu Phe Leu Asn  
210 215 220

Tyr Pro Pro Phe Thr Arg Ser Leu Arg Gly Ser Gln Arg Thr Trp Ala  
225 230 235 240

Pro Glu Pro Arg